

A summary of influenza surveillance indicators reported to MDH for the week ending February 2, 2019

Prepared by the Division of Infectious Disease Surveillance Prevention and Health Promotion Administration Maryland Department of Health

The data presented in this document are provisional and subject to change as additional reports are received.

# **SUMMARY**

During the week ending February 2, 2019 influenza-like illness (ILI) intensity in Maryland was LOW and there was WIDESPREAD geographic activity. The proportion of outpatient visits for ILI reported by Sentinel Providers decreased. The proportion of outpatient visits for ILI reported by Maryland Emergency Departments increased. The proportion of MRITS respondents reporting ILI slightly decreased from last week. Clinical laboratories reported an increase in the proportion of specimens testing positive for influenza. One hundred and seventeen specimens tested positive for influenza at the MDH lab. There were 95 influenza-associated hospitalizations. There were two respiratory outbreaks reported to MDH.

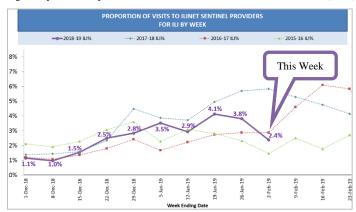
Click here to visit our influenza surveillance web page

ILI Intensity Levels
Minimal
<b>√</b> Low
Moderate
High

Influenza Geographic Activity
No Activity
Sporadic
Local
Regional
<b>✓</b> Widespread

# **ILINet Sentinel Providers**

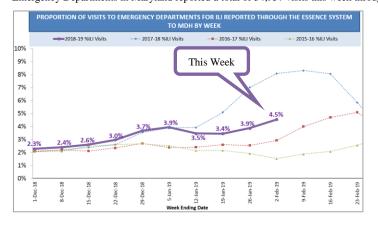
Eighteen providers reported a total of 6,078 visits this week. Of those, 144 (2.4%) were visits for ILI. This is above the Maryland baseline of 2.0%.



ILI Visits To Sentinel Providers By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	41 (28%)	70 (26%)	646 (29%)
Age 5-24	59 (41%)	100 (37%)	843 (38%)
Age 25-49	31 (22%)	67 (25%)	410 (18%)
Age 50-64	5 (3%)	17 (6%)	200 (9%)
$Age \ge 65$	8 (6%)	17 (6%)	122 (5%)
Total	144 (100%)	271 (100%)	2,221 (100%)

# Visits to Emergency Departments for ILI

Emergency Departments in Maryland reported a total of 54,937 visits this week through the ESSENCE surveillance system. Of those, 2,493 (4.5%) were visits for ILI.



ILI Visits To Emergency Departments By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	457 (18%)	428 (20%)	6,238 (23%)
Age 5-24	721 (29%)	592 (27%)	7,986 (30%)
Age 25-49	809 (32%)	717 (33%)	7,908 (29%)
Age 50-64	335 (13%)	305 (14%)	3,187 (12%)
Age ≥ 65	171 (7%)	128 (6%)	1,740 (6%)
Total	2,493 (100%)	2,170 (100%)	27,059 (100%)

### Neighboring states' influenza information:

Delaware <a href="http://dhss.delaware.gov/dph/epi/influenzahome.html">http://dhss.delaware.gov/dph/epi/influenzahome.html</a>

District of Columbia <a href="http://doh.dc.gov/service/influenza">http://doh.dc.gov/service/influenza</a>

 $\label{lem:pennsylvania} {\color{blue} \underline{\textbf{Pennsylvania}}} & \underline{\textbf{http://www.health.pa.gov/My\%20Health/Diseases\%20and\%20Conditions/I-L/Pages/Influenza.aspx\#.V-LtaPkrJD8} \\ \\ \underline{\textbf{Pennsylvania}} & \underline{\textbf{Pen$ 

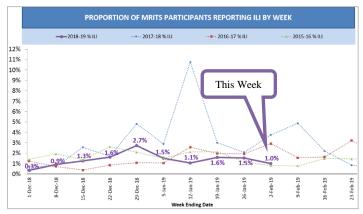
Virginia http://www.vdh.virginia.gov/epidemiology/influenza-flu-in-virginia/influenza-surveillance/

West Virginia <a href="http://dhhr.wv.gov/oeps/disease/flu/Pages/fluSurveillance.aspx">http://dhhr.wv.gov/oeps/disease/flu/Pages/fluSurveillance.aspx</a>

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#### Community-based Influenza Surveillance (MRITS)

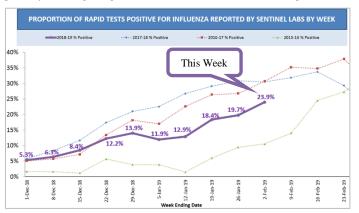
MRITS is the Maryland Resident Influenza Tracking System, a weekly survey for influenza-like illness (ILI). A total of 595 residents responded to the MRITS survey this week. Of those, 6 (1.0%) reported having ILI and missing 18 cumulative days of regular daily activities.

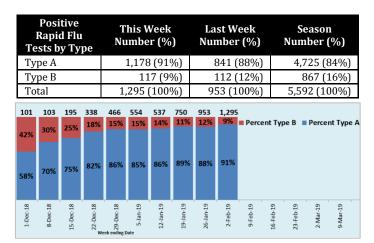


MRITS Respondents Reporting ILI By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	0 (0%)	0 (0%)	10 (8%)
Age 5-24	0 (0%)	3 (38%)	31 (25%)
Age 25-49	1 (17%)	2 (25%)	32 (26%)
Age 50-64	3 (50%)	3 (38%)	26 (21%)
Age ≥ 65	2 (33%)	0 (0%)	23 (19%)
Total	6 (100%)	8 (100%)	122 (100%)

# **Clinical Laboratory Influenza Testing**

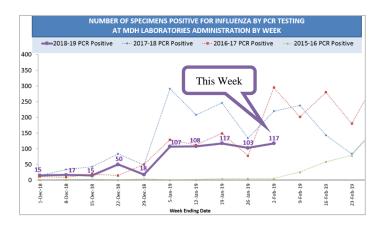
There were 65 clinical laboratories reporting 5,412 influenza diagnostic tests, mostly rapid influenza diagnostic tests (RIDTs). Of those, 1,295 (23.9%) were positive for influenza. Of those testing positive, 1,178 (91%) were influenza Type A and 117 (9%) were influenza Type B. The <u>reliability of RIDTs</u> depends largely on the conditions under which they are used. False-positive (and true-negative) results are more likely to occur when the disease prevalence in the community is low, which is generally at the beginning and end of the influenza season and during the summer.





### State Laboratories Administration Influenza Testing

The MDH Laboratories Administration performed a total of 199 PCR tests for influenza and 117 (58.8%) were positive for influenza. Of those testing positive, 90 (77%) were positive for Type A (H1), 18 (15%) were positive for Type A (H3), 8 (7%) were positive for Type B (Victoria) and 1 (1%) was positive for Type B (Yamagata). PCR testing is more reliable than RIDT. The MDH testing identifies subtypes of influenza A and lineages of influenza B, information that is not available from the RIDT results. The table below summarizes results by type, subtype, and lineage.

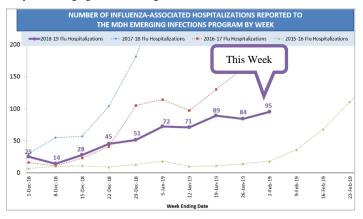


Positive PCR Tests by Type (Subtype)	This Week Number (%)	Last Week Number (%)	Season Number (%)
Type A (H1)	90 (77%)	74 (72%)	521 (75%)
Type A (H3)	18 (15%)	16 (16%)	113 (16%)
Type B (Victoria)	8 (7%)	13 (13%)	54 (8%)
Type B (Yamagata)	1 (1%)	0 (0%)	6 (1%)
Dual Type A (H1/H3)	0 (0%)	0 (0%)	0 (0%)
Total	117 (100%)	103 (100%)	694 (100%)

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#### **Influenza-associated Hospitalizations**

A total of 95 influenza-associated hospitalizations were reported this week. (A person with an overnight hospital stay along with a positive influenza test of any kind, e.g., RIDT or PCR, is considered an "influenza-associated hospitalization" for purposes of influenza surveillance.) This surveillance is conducted as a component of the Maryland Emerging Infections Program.



Influenza- Associated Hospitalizations by Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	9 (9%)	5 (6%)	73 (11%)
Age 5-17	8 (8%)	5 (6%)	30 (5%)
Age 18-24	1 (1%)	1 (1%)	13 (2%)
Age 25-49	13 (14%)	21 (25%)	125 (19%)
Age 50-64	24 (25%)	20 (24%)	179 (28%)
Age ≥ 65	40 (42%)	32 (38%)	227 (35%)
Total	95 (100%)	84 (100%)	647 (100%)

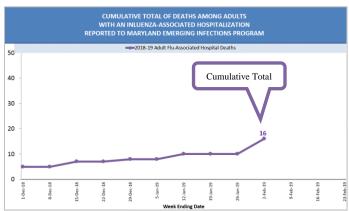
#### **Influenza-associated Deaths**

An influenza-associated death is one with a clinically compatible illness and a positive influenza test of any kind.

**Pediatric Deaths:** No pediatric (< 18 years of age) deaths were reported this week.

Influenza-associated pediatric mortality is a reportable condition in Maryland. Pediatric deaths are tracked without regard to hospitalization.

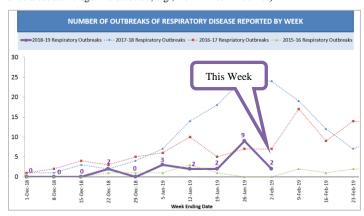
**Adult Deaths Among Hospitalized Patients:** A cumulative season total of 16 deaths have been reported among adults admitted to Maryland hospitals. Influenza-associated adult mortality is *not* a reportable condition in Maryland. However, surveillance for mortality in hospitalized adults is conducted as a component of the Maryland Emerging Infections Program.



Influenza-Associated Deaths	Cumulative Season Total
Pediatric Deaths (Age < 18)	0
Adult Deaths (in hospitalized cases)	16

#### **Outbreaks of Respiratory Disease**

There were two respiratory outbreaks reported to MDH this week. (Disease outbreaks of any kind are reportable in Maryland. Respiratory outbreaks may be reclassified once a causative agent is detected, e.g., from ILI to influenza.)



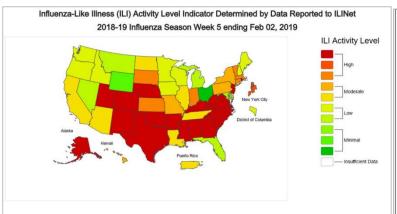
Respiratory Outbreaks by Type	This Week Number (%)	Last Week Number (%)	Season Number (%)
Influenza	2 (100%)	6 (67%)	14 (41%)
Influenza-like Illness	0 (0%)	1 (11%)	8 (24%)
Pneumonia	0 (0%)	2 (22%)	12 (35%)
Other Respiratory	0 (0%)	0 (0%)	0 (0%)
Total	2 (100%)	9 (100%)	34 (100%)

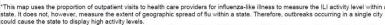
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# National Influenza Surveillance (CDC)

Influenza activity increased in the United States. Influenza A(H1N1)pdm09, influenza A(H3N2), and influenza B viruses continue to co-circulate.

- Viral Surveillance: The percentage of respiratory specimens testing positive for influenza viruses in clinical laboratories increased. Influenza A viruses have predominated in the United States since the beginning of October. Influenza A(H1N1)pdm09 viruses have predominated in most areas of the country, however influenza A(H3) viruses have predominated in the southeastern United States (HHS Region 4).
- Influenza-like Illness Surveillance: The proportion of outpatient visits for influenza-like illness (ILI) increased to 4.3%, which is above the national baseline of 2.2%. All 10 regions reported ILI at or above their region-specific baseline level.
- Geographic Spread of Influenza: The geographic spread of influenza in Puerto Rico and 47 states was reported as widespread; two states reported regional activity; the District of Columbia and one state reported local activity; the U.S. Virgin Islands reported sporadic activity; and Guam did not report.
- Influenza-associated Hospitalizations: A cumulative rate of 20.1 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported. The highest hospitalization rate is among adults 65 years and older (53.0 hospitalizations per 100,000 population).
- Pneumonia and Influenza Mortality: The proportion of deaths attributed to pneumonia and influenza (P&I) was below the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- Influenza-associated Pediatric Deaths: Four influenza-associated pediatric deaths were reported to CDC during week 5.
- Outpatient Illness Surveillance: Nationwide during week 5, 4.3% of patient visits reported through the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) were due to influenza-like illness (ILI). This percentage is above the national baseline of 2.2%. (ILI is defined as fever (temperature of 100°F [37.8°C] or greater) and cough and/or sore throat.)



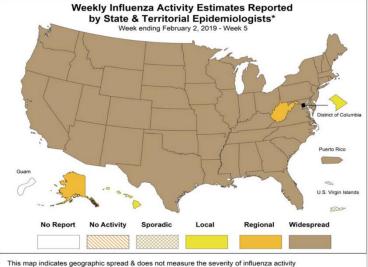


Could cause the state to display high activity levels.

Data collected in LINet may disproportionally represent certain populations within a state, and therefore, may not accurately depict the full picture of influenza activity for the whole state.

Juli picture of influenza activity for the whole state.

Data displayed in this map are based on data collected in ILINet, whereas the State and Territorial flu activity map is based on reports from state and territorial epidemiologists. The data presented in this map is preliminary and may change as more data are received. Differences in the data presented here by CDC and independently by some state health departments likely represent differing levels of data completeness with data presented by the state likely being the more complete.



# Where to get an influenza vaccination

Interested in getting a flu vaccine for the 2018-19 influenza season? Go to <a href="https://phpa.health.maryland.gov/influenza/Pages/getvaccinated.aspx">https://phpa.health.maryland.gov/influenza/Pages/getvaccinated.aspx</a> and click on your county/city of residence. You will be redirected to your local health department website for local information on where to get your flu vaccine.